Arduino in Sketch

+sendDataToSerial()

This function sends the data from the 2 sensors to the serial bus. In takes readings every fraction of a second and constantly updates the bus.

Interpreting Serial with Python

+interpretSerial(): void

This function takes the data in the serial and uses it to determine if a person has walked by.

+insertIntoDatabase(): void

This uses Python and mySQL to insert an entry into the database.

Database in MySQL

+Count
Primary Key

+Date
The date the entry was inserted.

+Time
The time the entry was inserted

Website in PHP

+getHourTotal(): void

On page load, this uses mySQL to pull the per hour information.

+getPastWeekTotal(): void

On page load, this function uses mySQL to get the data for the previous week.

+getAverages(date): void

This function gets the averages for every length of time.
(hour/day/week/month/year)

+getAllCounts(): void

This function gets the total count for the previous hour/day/week/month/year.

+getCount()

This function gets the count for a specific day.

+getTotalOverPeriod()

This function takes a start date and time and a final date and time and calculates the total in between them.

+getTotalRows()

This function counts the total entries in the database.